

2017

National Library of Medicine Informatics Training Conference



UNIVERSITY OF CALIFORNIA, SAN DIEGO, CA

June 5, 2017

June 6, 2017

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NLM Informatics Training Conference 2017
University of California, San Diego

Agenda

Day One

7:00 – 8:00 AM

Monday, June 5, 2017

Transportation Time | Conference Hotel → UCSD Price Center

There will be complementary shuttles from the Hilton La Jolla to the UCSD Price Center.

8:00 – 8:45 AM

Registration and Breakfast

Location: UCSD Price Center West – Ballrooms A & B
[Posters to also be set-up during this time]

8:45 – 9:00 AM

Welcome to UCSD | Dr. Lucila Ohno-Machado

Professor and Department Chair, Associate Dean for Informatics and Technology, University of California, San Diego

9:00 – 9:10 AM

Remarks from the NLM | Dr. Patricia Flatley Brennan

Director, National Library of Medicine

9:10 – 9:20 AM

Introduction to Training Directors and Trainees | Dr. Valerie Florance

Director, NLM Extramural Programs

9:20 – 10:20 AM

Plenary Session #1 | Moderator: TBA

(1 hour, 4 papers) (12 minutes per presentation, 3 minutes for Q&A)

Location: UCSD Price Center, West Ballroom B

1. Complexity of Decision-Making in Surgical Care Provided in Patient Portals – Jamie Robinson/Vanderbilt University
2. Longitudinal Changes in Psychological States in Online Health Community Members: Understanding the Long-Term Effects of Participating in Online Depression Health Community – Albert Park/University of Utah
3. Visual Analytics Approach for Identifying Diabetes Self-Management Trends Using Patient-Generated Data – Daniel Feller/Columbia University
4. Using Modern Optical See-Through Augmented Reality (OSTAR) to Improve Medical Practices – Ryan James/University of Washington

10:20 – 11:20 AM

Posters and Coffee Break

Location: UCSD Price Center, West Ballrooms A & B (Poster Exhibit Area)

Topic 1 – Clinical Research Translational Informatics:

- #101 Integration of Genomic Results in EHR Requires Multidisciplinary Workflow Harmonization – Jung Hoon-Son/Columbia University
- #102 Using Recurrent Neural Networks for EHR Phenotyping via Clinical Free-Text and Word Embedding
– Joseph Romano/Columbia University
- #103 Toward Shareable Individualized Drug Interaction Alerts – Samuel Rosko/University of Pittsburgh
- #104 Analysis of Type 2 Diabetes Etiology through PheWAS and Functional Studies – Jamie Fox/University of Wisconsin-Madison

Topic 2 – Healthcare Informatics:

- #105 The Efficacy and Unintended Consequences of Hard-Stop Electronic Alerts in Electronic Health Record Systems: A Systematic Review – Emily Powers/Yale University
- #106 Assessment of Laboratory System-Assigned LOINC Codes for Common Tests – Sharidan Parr/Department of Veterans Affairs
- #107 Current Practices in Integrating Social and Behavioral Data into Patient Care at a VAMC – Cherie Luckhurst/Department of Veterans Affairs
- #108 Treatment and Management of Smoking at Health Clinics, ICUs and Quitlines – Andrey Soares/University of Colorado-Denver
- #109 Learning a Comorbidity-Driven Taxonomy of Pediatric Pulmonary Hypertension – Mei-Sing Ong/Harvard Medical School
- #110 MetaMapLite in Excel: Named-Entity Recognition for Non-technical Users – Ravi Bhupatiraju/National Library of Medicine
- #111 Exploration of Operational Data Streams as a Source of Actionable Insight – Dana Womack/Oregon Health & Science University
- #112 Assessing Ghana's eHealth Workforce: Implications for Planning and Training Programs – Henry Ogoe/University of Pittsburgh
- #113 A Comparative Social Network Analysis of Breast Cancer Provider Collaboration – Bryan Steitz/Vanderbilt University
- #114 Examining the Video Quality of a Hospice Telehealth Intervention – Claire Han/University of Washington
- #115 A Pipeline for Classifying Clinical Phenotypes in the National Health and Nutrition Examination Survey – Diane Walker/University of Utah
- #116 Understanding Genetic Influence on Molecular Phenotype Variation in iPSC-Derived Cells – Margaret Donovan/University of California, San Diego
- #117 Semantic Characterization of Clinical Trial Criteria and MIMIC-3 Patient Notes – Jianyin Shao/University of Utah

11:20 – 12:20 PM

Open Mic Session X1: Translational Bioinformatics and Clinical Research Informatics | Moderator: TBA (12 speakers, 5 minutes per speaker including questions)

Location: UCSD Price Center, West Ballroom B

1. Interpreting Genetic Variants of Unknown Significance by Integrating Metabolomic and Genomic Data – Lillian Ashmore/Baylor College of Medicine
2. Systems Approach to Understanding the Gut-Brain Axis in Mental Health Disorders – Eric Leung/Oregon Health and Science University
3. Computational Identification of Potential Driver Mutations in Head & Neck Squamous Cell – James Jacobs/Oregon Health and Science University
4. Identifying Pathways Affected by Macrophage Depletion – Yasmin Lyons/University of Texas MD Anderson Cancer Center
5. OWL-NETS: Abstracting OWL for Network Inference – Tiffany Callahan/University of Colorado-Denver
6. Model Based Heritability Scores for High-throughput Sequencing Data – Jenny Shi/University of Colorado-Denver
7. Visual Analysis and Integration of Knowledge Networks using Genetic Data – Laura Stevens/University of Colorado-Denver
8. Applying Deep Learning to Improve Interpretation of Digital Mammograms towards Reducing False Recall Rates – Sarah Aboutalib/University of Pittsburgh
9. Multi-view Statistical Analysis of Alzheimer’s Disease using DTI-Derived Brain Imaging Data and CSF Measures via Generalized Eigenvalue Problem – Seong Hwang/University of Wisconsin-Madison
10. Bayesian Modeling for Genetic Risk of Anterior Cruciate Ligament Rupture in Dogs – Lauren Baker/University of Wisconsin-Madison
11. Patient-facing Conversational Agents in Healthcare – Will Kearns/University of Washington
12. VIVED: Visit Information Visualization for the Emergency Department – Haley Hunter-Zinck/Department of Veterans Affairs

12:20 – 1:30 PM

Lunch and Special Sessions (Birds of a Feather Tables – Location: UCSD Price Center, West Ballroom B)

12:30 – 1:30 PM

Training Director’s Meeting (Location: UCSD Price Center Forum)

12:30 – 1:30 PM

NLM Career Development Award and ESI R01 Informational Session – For Graduating Post-doctoral Trainees (Location: John Muir College Room)

1:40 – 2:20 PM

Parallel Paper Focus Session A (locations are noted below), (2 papers at 8 minutes each plus 20 minutes for Q&A)

Focus Session A1 | Moderator: TBA

Location: UCSD Price Center, West Ballroom A

- Detecting Missing Hierarchical Relations in SNOMED CT using Lexical Features – Satyajett Raje/National Library of Medicine
- The Newman Test: Small Sample Size Statistic to Personalize Transcriptomic Data Analysis – Zachary Abrams/The Ohio State University

Focus Session A2 | Moderator: TBA

Location: UCSD Price Center, West Ballroom B

- Breast Cancer Gene Expression Difference between Pre- and Post-Menopausal Women – Yuzhe Liu/University of Pittsburgh
- Identifying the Role of Non-Coding Regulatory Variants in Retinal Disease – Evan Jones/Baylor College of Medicine

Focus Session A3 | Moderator: TBA

Location: UCSD Price Center, East Ballroom

- Identification of Repeatable Research using a Machine Learning Classifier – Negacy Hailu/University of Colorado-Denver
- Recognizing Question Entailment for Consumer Health Question Answering – Asma Abacha/National Library of Medicine

2:20 – 3:20 PM

Posters and Coffee Break

Location: UCSD Price Center, West Ballrooms A & B (Poster Exhibit Area)

Topic – Bioinformatics/Computational Biology:

- #118 Inferring Clonal Heterogeneity in Chronic Lymphocytic Leukemia – Mark Zucker/The Ohio State University
- #119 Using Sequence-based Features to Robustly Mine Metagenomic Data for Viral Sequences – Cody Glickman/University of Colorado-Denver
- #120 Chromatin Accessibility Profiling in Human Cell Models for Neuropsychiatric Illness – Marion Riggs/Harvard Medical School
- #121 Named Entity Recognition in Function Neuroimaging Literature – Alba Seco de Herrera/National Library of Medicine
- #122 Building a Pseudogene-Gene Network Database to Mine for Phylogenetic Relationships – Travis Johnson/The Ohio State University
- #123 Natural Product Targetome in Cancer: Definition and Application – Steve Chamberlin/Oregon Health & Science University
- #124 MeTeOR: Literature-Based Hypothesis Generation and Precision Medicine – Stephen Wilson/Baylor College of Medicine

- #125 A New Network-Based Method for Integrated Analysis of Biomedical Data – Andrew Laitman/Baylor College of Medicine
- #126 Reporting of Somatic Mosaic Mutations in Brain Development Disorders – Nathaniel Delos Santos/University of California, San Diego
- #127 Automated Mechanistic Hypothesis Generation from Qualitative Biological Networks – Michael Kochen/Vanderbilt University
- #128 Using Pharmacogenomic and Pharmacokinetic Data to Predict Levels of Antiretroviral Drug Resistance – Juandalyn Burke/University of Washington
- #129 Recent Extensions and Applications of Nested Effects Models – Yuriy Sverchkov/University of Wisconsin-Madison
- #130 Identifying Abnormal Pathways from Gene Expression of Individual Samples – Michael Klein/Yale University
- #131 Computationally Unraveling the Regulatory Impacts of Neanderthal Introgression – Natalie Telis/Stanford University

3:30 – 4:45 PM

Plenary Session #2 | Moderator: TBA

Location: UCSD Price Center, West Ballroom B (75 minutes, 5 papers)
(12 minutes per presentation, 3 minutes for Q&A)

1. Integrative Cancer Patient Stratification via Subspace Merging – Michael Sharpnack/The Ohio State University
2. Novel Pedigree Analysis Implicates DNA Repair and Chromatin Remodeling in MM Risk – Rosalie Waller/University of Utah
3. A Spatiotemporal Model to Simulate Chemotherapy Regimens for Heterogeneous Bladder Cancer Metastases to the Lung - Kimberly Kanigel Winner/University of Colorado
4. Correlates of Cognitive Phenotype Severity in Autism Spectrum Disorders - Andrew Chiang/Columbia University
5. The Cancer Targetome: A Critical Step Towards Evidence-Based Precision Oncology – Aurora Blucher/Oregon Health & Science University

4:45 – 9:30 PM

4:45 – 5:30 PM

Dinner Location: Birch Aquarium

Transportation Time | UCSD → Birch Aquarium

Complementary shuttle that will take guests from the UCSD Price Center to the Birch Aquarium for the reception and dinner.

5:30 – 6:30 PM

6:30 – 8:30 PM

8:30 – 9:30 PM

Reception

Dinner

Transportation Time

NLM Informatics Training Conference 2017
University of California, San Diego

Agenda

Day Two

7:00 – 7:55 AM

Tuesday, June 6, 2017

Transportation Time | Conference Hotel → UCSD Price Center

There will be complementary shuttles from the Hilton La Jolla to the UCSD Price Center.

8:00 – 9:00 AM

Posters (Unattended) and Breakfast

Location: UCSD Price Center, West Ballrooms A & B (Poster Exhibit Area)

Topic 1 – Clinical Research Translational Informatics

Topic 2 – Healthcare Informatics

9:00 – 9:45 AM

Open Mic Session X2: Healthcare and Public Health Informatics

Moderator: TBA, (5 minutes per speaker including Q&A) Location: UCSD Price Center, West Ballroom B

1. Precision Behavioral Nutrition: Developing Methods for Psychosocial Phenotyping – Marissa Burgemaster/Columbia University
2. Tracking the Opioid Epidemic Through OHDSI – Benjamin Slovis/Columbia University
3. Architecting a Centralized, Patient-Facing Outpatient Medication List – Frank Pandolfe/Harvard University
4. DQe: an open source interoperable toolkit to evaluate EHR data quality – Hossein Estiri/Harvard University
5. Smartphone Button Usability in Movement Disorders – Jeff Day/National Library of Medicine
6. An Open-Source Library of Medical-Imaging-Derived 3D Polygonal Models for Use in Public Health, Medical and STEM Applications – Kristen Browne/National Library of Medicine
7. Structured Information Displays for the Comparison of Clinical Trials – Jiantao Bian/University of Utah
8. Integration of Public Health Information in CDS at the Point of Care – Jean Louis/University of Utah
9. Towards the Design of an Inpatient Peer Support System – Shefali Haldar/University of Washington

9:45 – 10:00 AM

Coffee Break

10:00 – 11:15 AM

Plenary Session 3 | Moderator: TBD, (1 hour and 15 minutes, 5 papers)
(12 minutes per presentation, 3 minutes for Q&A) Location: UCSD Price Center, West Ballroom B

1. MetaSRA: Normalized Sample-Specific Metadata for the Sequence Read Archive – Matthew Bernstein/University of Wisconsin-Madison
2. The Precarious Wisdom of Communal Science – Arjun Manrai/Harvard Medical School
3. Identifying and Characterizing Near-Duplicates in Big Clinical Note Datasets – Rodney Gabriel/University of California, San Diego
4. Beyond a One-Size-Fits-All Evaluation of Causal Inference Methods – Alejandro Schuler/Stanford University
5. Antihypertensives, Statins, and Risk for Dementias in Elders – Fabrico Kury/National Library of Medicine

11:15 – 12:15 PM

Lunch/Special Sessions (Birds of a Feather Tables – Location: UCSD Price Center, West Ballroom B)

12:15 – 1:00 PM

Parallel Paper Focus Session B (papers at 8 minutes each plus 20 minutes for Q&A) (Locations as noted below)

Focus Session B1 | Moderator: TBD, Location: UCSD Price Center, West Ballroom A

- Annual Hospitalization-Related Burden and Costs of Inflammatory Bowel Diseases: Quest for High-Value Care – Siddharth Singh/University of California San Diego
- Identifying Needs for a Health Policy Dashboard in South Africa – Lauren Snyder/University of Washington
- Performance of End Stage Renal Disease (ESRD) Anemia Identification Algorithm in Veterans – Celena Peters/Department of Veterans Affairs

Focus Session B2 | Moderator: TBD, Location: UCSD Price Center, West Ballroom B

- Digital Phenotyping in Schizophrenia: Preliminary Analysis of Data from the SMART Study – John Torous/Harvard University
- Patient-Centered Technology use for Cancer Among the Underserved: A Review – Will Tarver/Department of Veterans Affairs
- Network Integration for Precision Drug Models – Jennifer Wilson/Stanford University

Focus Session B3 | Moderator: TBD, Location: UCSD Price Center, East Ballroom

- Toxin Diversity Evolves via Genomic Reorganization and Transcriptional Rewiring – Abigail Lind/Vanderbilt University
- Towards Identifying Host Genes that Control Gut Microbial Functions and M Metabolism – Lindsay Traeger/University of Wisconsin-Madison
- Using the Microbial Composition within Sputum to Stratify Patients by Asthma Severity – Daniel Spakowicz/Yale University

1:00 – 2:00 PM

Plenary Session 4 | Moderator: TBA, (60 minutes, 4 papers) (12 minutes per presentation, 3 minutes for Q&A) Location: UCSD Price Center, West Ballroom B

1. Drug Safety Monitoring with Composite Representations and Machine Learning – Justin Mower/Baylor College of Medicine
2. The Outcome of Opioid/Antibiotic Medication Standardization – Erin Hickman/Oregon Health & Science University
3. Deep Learning Derived Novel Representation of Omics Data Enhances Predictive Modeling of Cancer Drug Sensitivity – Michael Ding/University of Pittsburgh
4. Genomic and Clonal Alterations of Drug Resistance in the NeoALTTO Trial – Ryan Powles/Yale University

2:00 – 2:30 PM

UCSD Showcase | Moderator: TBD

Location: UCSD Price Center, West Ballroom B

Dr. Lucila Ohno-Machado

Dr. David A. Brenner – VC Health Science and Dean, School of Medicine

Dr. Sandra Brown – Vice Chancellor for Research

2:30 – 2:45 PM

Closing Session and Awards | Dr. Lucila Ohno-Machado and Dr. Valerie Florance

Location: UCSD Price Center, West Ballroom B

2:45 – 3:45 PM

Transportation Time to Hotel and Airport

Attendee and Presenter Information

Full Training Conference Attendee and Presenters List by Program

Program	Presenter
<u>Columbia University</u>	
George Hripcsak - Training Director	
Plenary Presentation	Andrew Chiang
Plenary Presentation	Daniel Feller
Poster Presentation	Joseph Romano
Poster Presentation	Jung Hoon-Son
Open Mic	Benjamin Slovis
<u>Harvard University</u>	
Alexa McCray - Training Director	
Adam Wright - Attending for Alexa McCray	
Plenary Presentation	Arjun Manrai
Focus Presentation	John Torous
Poster Presentation	Mei-Sing Ong
Poster Presentation	Marion Riggs
Open Mic	Hossein Estiri
Open Mic	Frank Pandolfe
<u>Ohio State University</u>	
Peter Embi - Training Director	
Plenary Presentation	Michael Sharpnack
Focus Presentation	Zachary Abrams
Poster Presentation	Travis Johnson
Poster Presentation	Mark Zucker
<u>Oregon Health & Science University</u>	
William Hersh - Training Director	
Plenary Presentation	Aurora Blucher
Plenary Presentation	Erin Hickman
Poster Presentation	Dana Womack
Poster Presentation	Steve Chamberlin
Open Mic	Eric Leung
Open Mic	James Jacobs

<u>Rice University</u>	
Tony Gorry - Training Director	
Lydia Kavraki - Attending for Tony Gorry	
Plenary Presentation	Justin Mower
Focus Presentation	Evan Jones
Focus Presentation	Jennifer Wilson
Poster Presentation	Andrew Laitman
Poster Presentation	Stephen Wilson
Open Mic	Lillian Ashmore
<u>Stanford University</u>	
Steven Bagley - Training Director	
Plenary Presentation	Alejandro Schuler
Poster Presentation	Natalie Telis
<u>University of California, San Diego</u>	
Lucila Ohno-Machado - Training Director	
Plenary Presentation	Rodney Gabriel
Focus Presentation	Siddharth Singh
Poster Presentation	Nathaniel Delos Santos
Poster Presentation	Margaret Donovan
<u>University of Colorado, HSC</u>	
Lawrence Hunter - Training Director	
Plenary Presentation	Kanigel Winner
Focus Presentation	Negacy Hailu
Poster Presentation	Andrey Soares
Poster Presentation	Cody Glickman
Poster Presentation	Andrey Soares
Open Mic	Tiffany Callahan
Open Mic	Jenny Shi
Open Mic	Laura Stevens
<u>University of Pittsburgh</u>	
Rebecca Jacobson - Training Director	
Plenary Presentation	Michael Ding
Focus Presentation	Yuzhe Liu
Poster Presentation	Henry Ogoe
Poster Presentation	Samuel Rosko
Open Mic	Sarah Aboutalib

<u>University of Texas MD Anderson Cancer Center</u>	
- Training Director	
Open Mic	Yasmin Lyons
<u>University of Utah</u>	
John Hurdle - Training Director	
Plenary Presentation	Albert Park
Plenary Presentation	Rosalie Waller
Poster Presentation	Jianyin Shao
Poster Presentation	Diane Walker
Open Mic	Jiantao Bian
Open Mic	Jean Louis
<u>University of Washington</u>	
Peter Tarczy-Hornoch - Training Director	
George Demiris - Attending for Peter Tarczy-Hornoch	
Plenary Presentation	Ryan James
Focus Presentation	Lauren Snyder
Poster Presentation	Juandalyn Burke
Poster Presentation	Claire Han
Open Mic	Shefali Haldar
Open Mic	Will Kearns
<u>University of Wisconsin-Madison</u>	
George N. Phillips - Training Director	
Mark Craven - Attending for George Phillips	
Plenary Presentation	Matthew Bernstein
Poster Presentation	Yuriy Sverchkov
Focus Presentation	Lindsay Traeger
Poster Presentation	Jamie Fox
Open Mic	Seong Hwang
<u>Vanderbilt University</u>	
Cindy Gadd - Training Director	
Plenary Presentation	Jamie Robinson
Focus Presentation	Abigail Lind
Poster Presentation	Bryan Steitz
Poster Presentation	Michael Kochen

<u>Yale University</u>	
Cynthia Brandt - Training Director	
Plenary Presentation	Ryan Powles
Focus Presentation	Daniel Spakowicz
Poster Presentation	Michael Klein
Poster Presentation	Elizabeth Powers
<u>Veterans Administration</u>	
Steven Brown - Training Director	
Focus Presentation	Celena Peters
Focus Presentation	Will Tarver
Poster Presentation	Sharidan Parr
Poster Presentation	Cherie Luckhurst
Open Mic	Haley Hunter-Zinck
<u>National Library of Medicine</u>	
Paul Fontelo - Training Director	
Plenary Presentation	Fabrico Kury
Focus Presentation	Asma Abacha
Focus Presentation	Satyajett Raje
Poster Presentation	Alba Seco de Herrera
<u>NLM Intramural Open Mic Session</u>	
Open Mic	Ravi Bhupatiraju
Open Mic	Kristen Browne
Open Mic	Jeff Day

Plenary/Focus Session Presentations List

Name of Presenter	Institution	Title of Presentation
Plenary Session #1		
Jamie Robinson	Vanderbilt University	Complexity of Decision-Making in Surgical Care Provided in Patient Portals
Albert Park	University of Utah	Longitudinal Changes in Psychological States in Online Health Community Members: Understanding the Long-Term Effects of Participating in Online Depression Health Community
Daniel Feller	Columbia University	Visual Analytics Approach for Identifying Diabetes Self-Management Trends Using Patient-Generated Data
Jamie Fox	University of Wisconsin-Madison	Analysis of Type 2 Diabetes Etiology through PheWAS and Functional Studies
Plenary Session #2		
Michael Sharpnack	The Ohio State University	Integrative Cancer Patient Stratification via Subspace Merging
Rosalie Waller	University of Utah	Novel Pedigree Analysis Implicates DNA Repair and Chromatin Remodeling in MM Risk
Kimberly Kanigel Winner	University of Colorado	A Spatiotemporal Model to Simulate Chemotherapy Regimens for Heterogeneous Bladder Cancer Metastases to the Lung
Andrew Chiang	Columbia University	Correlates of Cognitive Phenotype Severity in Autism Spectrum Disorders
Aurora Blucher	Oregon Health & Science University	The Cancer Targetome: A Critical Step Towards Evidence-Based Precision Oncology
Plenary Session #3		
Matthew Bernstein	University of Wisconsin-Madison	MetaSRA: Normalized Sample-Specific Metadata for the Sequence Read Archive
Arjun Manrai	Harvard Medical School	The Precarious Wisdom of Communal Science

Rodney Gabriel	University of California, San Diego	Identifying and Characterizing Near-Duplicates in Big Clinical Note Datasets
Alejandro Schuler	Stanford University	Beyond a One-Size-Fits-All Evaluation of Causal Inference Methods
Fabrico Kury	National Library of Medicine	Antihypertensives, Statins, and Risk for Dementias in Elders
Plenary Session #4		
Justin Mower	Baylor College of Medicine	Drug Safety Monitoring with Composite Representations and Machine Learning
Erin Hickman	Oregon Health & Science University	The Outcome of Opioid/Antibiotic Medication Standardization
Michael Ding	University of Pittsburgh	Deep Learning Derived Novel Representation of Omics Data Enhances Predictive Modeling of Cancer Drug Sensitivity
Ryan Powles	Yale University	Genomic and Clonal Alterations of Drug Resistance in the NeoALTTO Trial
Focus Session A1		
Satyajett Raje	National Library of Medicine	Detecting Missing Hierarchical Relations in SNOMED CT using Lexical Features
Zachary Abrams	The Ohio State University	The Newman Test: Small Sample Size Statistic to Personalize Transcriptomic Data Analysis
Focus Session A2		
Yuzhe Liu	University of Pittsburgh	Breast Cancer Gene Expression Difference between Pre- and Post- Menopausal Women
Evan Jones	Baylor College of Medicine	Identifying the Role of Non-Coding Regulatory Variants in Retinal Disease
Focus Session A3		
Negacy Hailu	University of Colorado-Denver	Identification of Repeatable Research using a Machine Learning Classifier
Asma Abacha	National Library of Medicine	Recognizing Question Entailment for Consumer Health Question Answering
Focus Session B1		

Siddharth Singh	University of California San Diego	Annual Hospitalization-Related Burden and Costs of Inflammatory Bowel Diseases: Quest for High-Value Care
Lauren Snyder	University of Washington	Identifying Needs for a Health Policy Dashboard in South Africa
Celena Peters	Department of Veterans Affairs	Performance of End Stage Renal Disease (ESRD) Anemia Identification Algorithm in Veterans
Focus Session B2		
John Torous	Harvard University	Digital Phenotyping in Schizophrenia: Preliminary Analysis of Data from the SMART Study
Will Tarver	Department of Veterans Affairs	Patient-Centered Technology use for Cancer Among the Underserved: A Review
Jennifer Wilson	Stanford University	Network Integration for Precision Drug Models
Focus Session B3		
Abigail Lind	Vanderbilt University	Toxin Diversity Evolves via Genomic Reorganization and Transcriptional Rewiring
Lindsay Traeger	University of Wisconsin-Madison	Towards Identifying Host Genes that Control Gut Microbial Functions and M Metabolism
Daniel Spakowicz	Yale University	Using the Microbial Composition within Sputum to Stratify Patients by Asthma Severity

Poster Presentation List

Poster Number	Name of Presenter	Institution	Title of Presentation
#101	Jung Hoon-Son	Columbia University	Integration of Genomic Results in EHR Requires Multidisciplinary Workflow Harmonization
#102	Joseph Romano	Columbia University	Using Recurrent Neural Networks for EHR Phenotyping via Clinical Free-Text and Word Embedding
#103	Samuel Rosko	University of Pittsburgh	Toward Shareable Individualized Drug Interaction Alerts
#104	Jamie Fox	University of Wisconsin-Madison	Analysis of Type 2 Diabetes Etiology through PheWAS and Functional Studies
#105	Emily Powers	Yale University	The Efficacy and Unintended Consequences of Hard-Stop Electronic Alerts in Electronic Health Record Systems: A Systematic Review
#106	Sharidan Parr	Department of Veterans Affairs	Assessment of Laboratory System-Assigned LOINC Codes for Common Tests
#107	Cherie Luckhurst	Department of Veterans Affairs	Current Practices in Integrating Social and Behavioral Data into Patient Care at a VAMC
#108	Andrey Soares	University of Colorado-Denver	Treatment and Management of Smoking at Health Clinics, ICUs and Quitlines
#109	Mei-Sing Ong	Harvard Medical School	Learning a Comorbidity-Driven Taxonomy of Pediatric Pulmonary Hypertension
#110	Ravi Bhupatiraju	National Library of Medicine	MetaMapLite in Excel: Named-Entity Recognition for Non-technical Users
#111	Dana Womack	Oregon Health & Science University	Exploration of Operational Data Streams as a Source of Actionable Insight
#112	Henry Ogoe	University of Pittsburgh	Assessing Ghana's eHealth Workforce: Implications for Planning and Training Programs
#113	Bryan Steitz	Vanderbilt University	A Comparative Social Network Analysis of Breast Cancer Provider Collaboration
#114	Claire Han	University of Washington	Examining the Video Quality of a Hospice Telehealth Intervention

#115	Diane Walker	University of Utah	A Pipeline for Classifying Clinical Phenotypes in the National Health and Nutrition Examination Survey
#116	Margaret Donovan	University of California, San Diego	Understanding Genetic Influence on Molecular Phenotype Variation in iPSC-Derived Cells
#117	Jianyin Shao	University of Utah	Semantic Characterization of Clinical Trial Criteria and MIMIC-3 Patient Notes
#118	Mark Zucker	The Ohio State University	Inferring Clonal Heterogeneity in Chronic Lymphocytic Leukemia
#119	Cody Glickman	University of Colorado-Denver	Using Sequence-based Features to Robustly Mine Metagenomic Data for Viral Sequences
#120	Marion Riggs	Harvard Medical School	Chromatin Accessibility Profiling in Human Cell Models for Neuropsychiatric Illness
#121	Alba Seco de Herrera	National Library of Medicine	Named Entity Recognition in Function Neuroimaging Literature
#122	Travis Johnson	The Ohio State University	Building a Pseudogene-Gene Network Database to Mine for Phylogenetic Relationships
#123	Steve Chamberlin	Oregon Health & Science University	Natural Product Targetome in Cancer: Definition and Application
#124	Stephen Wilson	Baylor College of Medicine	MeTeOR: Literature-Based Hypothesis Generation and Precision Medicine
#125	Andrew Laitman	Baylor College of Medicine	A New Network-Based Method for Integrated Analysis of Biomedical Data
#126	Nathaniel Delos Santos	University of California, San Diego	Reporting of Somatic Mosaic Mutations in Brain Development Disorders
#127	Michael Kochen	Vanderbilt University	Automated Mechanistic Hypothesis Generation from Qualitative Biological Networks
#128	Juandalyn Burke	University of Washington	Using Pharmacogenomic and Pharmacokinetic Data to Predict Levels of Antiretroviral Drug Resistance
#129	Yuriy Sverchkov	University of Wisconsin-Madison	Recent Extensions and Applications of Nested Effects Models
#130	Michael Klein	Yale University	Identifying Abnormal Pathways from Gene Expression of Individual Samples
#131	Natalie Telis	Stanford University	Computationally Unraveling the Regulatory Impacts of Neanderthal Introgression

Open Mic Presentations List

Listed Alphabetically by Presenter

Name of Presenter	Institution	Title of Presentation
Aboutalib, Sarah	University of Pittsburgh	Applying Deep Learning to Improve Interpretation of Digital Mammograms towards Reducing False Recall Rates
Ashmore, Lillian	Baylor College of Medicine	Interpreting Genetic Variants of Unknown Significance by Integrating Metabolomic and Genomic Data
Baker, Lauren	University of Wisconsin-Madison	Bayesian Modeling for Genetic Risk of Anterior Cruciate Ligament Rupture in Dogs
Bian, Jiantao	University of Utah	Structured Information Displays for the Comparison of Clinical Trials
Browne, Kristen	National Library of Medicine	An open-source library of medical-imaging-derived 3D polygonal models for use in public health, medical and STEM applications
Burgemaster, Marissa	Columbia University	Precision Behavioral Nutrition: Developing Methods for Psychosocial Phenotyping
Callahan, Tiffany	University of Colorado-Denver	OWL-NETS: Abstracting OWL for Network Inference
Day, Jeff	National Library of Medicine	Smartphone Button Usability in Movement Disorders
Estiri, Hossein	Harvard University	DQe: an open source interoperable toolkit to evaluate EHR data quality
Haldar, Shefali	University of Washington	Towards the Design of an Inpatient Peer Support System
Hunter-Zinck, Haley	Veterans Affairs	VIVED: Visit Information Visualization for the Emergency Department
Hwang, Seong Jae	University of Wisconsin-Madison	Multi-view Statistical Analysis of Alzheimer's disease using DTI-derived Brain Imaging Data and CSF Measures via Generalized Eigenvalue Problem
Jacobs, James	Oregon Health and Science University	Computational Identification of Potential Driver Mutations in Head & Neck Squamous Cell
Kearns, Will	University of Washington	Patient-facing Conversational Agents in Healthcare

Leung, Eric	Oregon Health and Science University	Systems Approach to Understanding the Gut-Brain Axis in Mental Health Disorders”
Louis, Jean F.	University of Utah	Integration of public health information in CDS at the point of care
Lyons, Yasmin	Univeristy of Texas MD Anderson Cancer Center	Identifying Pathways Affected by Macrophage Depletion
Pandolfe, Frank	Harvard University	Architecting a centralized, patient-facing outpatient medication list
Shi, W Jenny	University of Colorado-Denver	Model Based Heritability Scores for High-throughput Sequencing Data
Slovis, Benjamin	Columbia University	Tracking the Opioid Epidemic Through OHDSI
Stevens, Laura	University of Colorado-Denver	Visual Analysis and Integration of Knowledge Networks using Genetic Data